AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGES
	1		9

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
PS10		EQWPMA-16-5127	

6. ISSUED BY	CODE	7. ADMINISTERED BY *(If other than Item 6)*	CODE
GSA, Office of Acquisition Repair & Alterations Division, Center 2 301 7th Street, SW, Room 6049 Washington, DC 20407 USA	WPH1AB	GSA, Office of Acquisition Repair & Alterations Division, Center 2 301 7th Street, SW, Room 6049 Washington, DC 20407 USA	WPH1AB

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*	(X)	9A. AMENDMENT OF SOLICITATION NO.
DCM ARCHITECTURE & ENGINEERING, LLC 339 N FRONT ST STE A CAMDEN, NJ 81021 DUNS: 788771983 Cage Code: 4ME27	☐	9B. DATED *(SEE ITEM 11)*
	☒	10A. MODIFICATION OF CONTRACT/ORDER NO. GS-11-P-16-YT-C-7173
		10B. DATED *(SEE ITEM 13)* Aug 24, 2016

CODE | FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

Modification Obligation Amount: $663,014.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
☐	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
☐	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
☒	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 52.243-4 Changes
☐	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (*Organized by UCF section headings, including solicitation/contract subject matter where feasible.*)

Please see attached

Committed

REVIEWED
By Francesco Dal Molin at 4:06 pm, Jun 08, 2018

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
Robert Benson, Executive VP	Isaac Karto, Contracting Officer Region 11
15B. CONTRACTOR/OFFEROR (b) (6) [redacted]	15C. DATE SIGNED: 6/5/2018
16B. UNITED STATES OF AMERICA (b) (6) [redacted] (Signature of Contracting Officer)	16C. DATE SIGNED: 06/10/2018

NSN 7540-01-[illegible]
Previous edition unusable

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA FAR (48 CFR) 53.243

(b) (6) [redacted]

Description of Amendment/Modification

Contract GS-11-P-16-YT-C-7173 for the Design Build to Replace Underground Hot Water Loop (NAC) is hereby modified (PS10) to add the following items to the Design-Build Hot Water Loop project at the Nebraska Avenue Complex, 3801 Nebraska Avenue, Washington, DC, as per the attached SOW dated April 12, 2018:

Furnish all labor, materials, equipment, special handling, supervision, and administrative services to Engineer, Furnish, and Install corrosion protected steel carrier pipe system in zones 2 & 3 like that approved for Zone 1 in Contract Modification #9. The Engineered steel pipe system shall have a minimum expected life of 45 years and have a minimum R value rating of 25.

Original contract amount (b) (4)
Modification AA01 (b) (4)
Modification PS02
Modification PS03
Modification PS04
Modification PS05
Modification PS06
Modification PS07
Modification PS08
Modification PS09
Modification PS10

Revised contract amount $2,715,840.14

The period of performance completion date of 10/01/2018 and all other terms and conditions remain unchanged. Should you have any questions regarding this modification, please contact the Contract Specialist (michele.appello@gsa.gov), or the COR (stephen.haag@gsa.gov).

SF30 List of Accounting Strings

Accounting String	Amount Obligated
EN-GS-11-P-16-YT-C-7173.2016.192X.11.P11B0001.PG54.PG413.N20.RDC03439.DC1432NA.080.....RDC03439DC1432NA.CIPIMP.1..	(b) (4)
EN-GS-11-P-16-YT-C-7173.2017.192X.11.P11B0001.PG54.PG413.K01.RDC03608.DC1432NA.083.....	
EN-GS-11-P-16-YT-C-7173.2017.192X.11.P11B0001.PG54.PGL11.V04.RDC03690.DC1432NA.084.....	
EN-GS-11-P-16-YT-C-7173.2017.192X.11.P11B0001.PG54.PGL26.V04.RDC03690.DC1432NA.084.....	
EN-GS-11-P-16-YT-C-7173.2017.192X.11.P11B0001.PG54.PG413.N20.RDC03439.DC1432NA.080.....RDC03439DC1432NA.CIPIMP.1..	
EN-GS-11-P-16-YT-C-7173.2018.192X.11.P11B0001.PG54.PG413.N20.RDC03439.DC1432NA.080.....RDC03439DC1432NA.CIPIMP.1..	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
0001	DB Hot Water Loop Design/Build Replacement of Underground Hot Water Loop. Period of Performance: 120 DAYS FROM NTP EN-GS-11-P-16-YT-C-7173.2016.192X 11.P11B0001.PG54.PG413.N20 RDC03439.DC1432NA.080.... RDC03439DC1432NA.CIPIMP.1.. Obligated:(b) (4) PoP: 09/08/2016 - 08/31/2018				(b) (4)
0002	MOD PS02 EMERGENCY UNDERGROUND HOT WA PIPE REPAIRS. Provide all materials, equipment, tools, labor and equipment to excavate and repair medium temperature hot water supply and return line. EN-GS-11-P-16-YT-C-7173.2017.192X 11.P11B0001.PG54.PG413.K01 RDC03608.DC1432NA.083..... Obligated: (b) (4) PoP: 09/08/2016 - 08/31/2018				(b) (4)
0003	MOD PS03 Per the scope of work, provide testing and sampling of suspected asbestos containing materials (ACM) and extend the POP 229 calendar days to				(b) (4)

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	10/15/2017. EN-GS-11-P-16-YT-C-7173.2017.192X 11.P11B0001.PG54.PGL11.V04 RDC03690.DC1432NA.084..... Obligated: (b) (4) PoP: 09/08/2016 - 08/31/2018				
0004	MOD PS04 Per the scope of work, conduct abatement of Asbestos Containing Materials (ACM) and extend POP 30 days EN-GS-11-P-16-YT-C-7173.2017.192X 11.P11B0001.PG54.PGL26.V04 RDC03690.DC1432NA.084..... Obligated: (b) (4) PoP: 09/08/2016 - 08/31/2018	(b) (4)			
0005	MOD PS05 Per the scope of work, provide all labor, materials, equipment and supervision for additional cutting and breaking for trench concrete demolition and extend the POP 15 days to 11/30/2017. EN-GS-11-P-16-YT-C-7173.2017.192X 11.P11B0001.PG54.PG413.N20 RDC03439.DC1432NA.080.... RDC03439DC1432NA.CIPIMP.1.. Obligated: (b) (4) PoP: 09/08/2016 - 08/31/2018	(b) (4)			

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
0006	MOD PS06 Per the scope of work, demo asphalt, excavate and back fill and pave asphalt. EN-GS-11-P-16-YT-C-7173.2017.192X 11.P11B0001.PG54.PG413.N20 RDC03439.DC1432NA.080.... RDC03439DC1432NA.CIPIMP.1.. Obligated: (b) (4) PoP: 09/08/2016 - 08/31/2018				(b) (4)
0007	MOD PS07 Per the scope of work, provide additional concrete cutting and breaking, additional equipment, demolition effort, and special handling/recycling at the crossing of NAC17 to NAC18 and at NAC 19. EN-GS-11-P-16-YT-C-7173.2017.192X 11.P11B0001.PG54.PG413.N20 RDC03439.DC1432NA.080.... RDC03439DC1432NA.CIPIMP.1.. Obligated: (b) (4) PoP: 09/08/2016 - 08/31/2018				(b) (4)
0008	MOD PS08 Per the scope of work, address underground obstructions via earthwork excavation, backfill, 2" & 3" pipe work, concrete				(b) (4)

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	removal, utility tracing, GPR services, and add delay claim. Extend POP by 274 days to 08/31/2018. EN-GS-11-P-16-YT-C-7173.2018.192X 11.P11B0001.PG54.PG413.N20 RDC03439.DC1432NA.080.... RDC03439DC1432NA.CIPIMP.1.. Obligated: (b) (4) PoP: 09/08/2016 - 08/31/2018				
0009	MOD PS09 Per the scope of work, replace Zone 1 plastic pipe with Perma Pipe 750 Supreme Ins Pipe (276 LF of 2 inch pipe, 216 LF of 3 inch pipe and 500 LF of 5 inch pipe) and extend the period of performance to 10/1/2018. EN-GS-11-P-16-YT-C-7173.2018.192X 11.P11B0001.PG54.PG413.N20 RDC03439.DC1432NA.080.... RDC03439DC1432NA.CIPIMP.1.. Obligated: (b) (4) PoP: 09/08/2016 - 10/01/2018	(b) (4)			
0010	MOD PS10 Per the scope of work, replace Zone 2 and 3 plastic pipe with Perma Pipe 750 Supreme Ins Pipe 1086 LF of 2 inch pipe, 1980 LF of 3 inch pipe and 1972 LF of 5	(b) (4)			

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	inch pipe. EN-GS-11-P-16-YT-C-7173.2018.192X 11.P11B0001.PG54.PG413.N20 RDC03439.DC1432NA.080.... RDC03439DC1432NA.CIPIMP.1.. Obligated: (b) (4) PoP: 09/08/2016 - 10/01/2018				

SCOPE OF WORK

Project: NAC Hot Water Loop Replacement.
Contract: GS-11-P-16-YT-C-7173.
PRN: EQWPMA-16-5127.
Mod No: PS10 Upgrade Zone 2 and Zone 3 to Coated Steel Pipe System.

Background

The NAC campus uses underground piping system to provide hot water to the buildings from a central boiler plant. The original underground piping over 40 years old, has degraded, and, is to be replaced under this contract. The current piping proposed to replace the original system in zone 1 is a corrosion resistant Fiberglass Reinforced Plastic (FRP) type system. In utilizing this product the facility operating engineers are limited by how much pressure and temperature they can operate the boiler plant at when pumping hot water into the FRP system. Upon further review we believe it to be in the Governments best interest to upgrade the FRP material to a coated steel carrier pipe, insulated, with PVC jacket.

Scope
Furnish all labor, materials, equipment, special handling, supervision, and administrative services to Engineer, Furnish, and Install corrosion protected steel carrier pipe system in zones 2 & 3 like that approved for Zone 1 in Contract Modification #9. The Engineered steel pipe system shall have a minimum expected life of 45 years and have a minimum R value rating of 25.

Period of Performance:
Period of Performance is extended to Midnight October 1, 2018.

Terms & Conditions:
All other terms and conditions of the contract remain unchanged.

(End of Scope)

339 North Front Street Camden NJ 08102
Phone (856) 479-9101 • Fax (856) 757-0082

Proposal PS010

Proposal #:18070

Attn: Michele Appello
U.S. General Services Administration
National Capital Region,
301 7th Street, SW Room 6049
Washington, DC 20407

Date: 5/14/2018

Project: Nebraska Ave. Complex Underground Piping

15.603 Abstract

The NAC campus uses underground piping system to provide hot water to the buildings from a central boiler plant. The original underground piping over 40 years has degraded and is to be replaced.

15.604 Objective

Provide an upgrade to FRP piping which will provide superior pressure and temperature ratings while still maintaining an acceptable life cycle for the system. The corrosion resistant FRP piping has a limitation on the temperature and pressure it is certified for. From a repair standpoint FRP piping requires a 6-hour cure time for glues and epoxy's. The system after repair is required to rest 2 hours after the glue cures before pressure testing. The number of certified FRP installers is much smaller as compared to the number of certified steel pipe fitters. It was observed on the campus that some of the buildings struggled to receive enough water when pump pressures were lower, this is due to the age of the buildings and has more to do with the piping systems in the boiler plant as well as the age of the campus. The HVAC systems has gone through many changes over the years, it was owned and operated by the Navy and subsequently has had many modifications through the years. The facility operating engineers are limited by how much pressure and temperature they can operate the boiler plant at when pumping hot water into the FRP system. In lieu of using FRP material to distribute hot water to the buildings we propose to use a coated steel carrier pipe in an Aerogel insulation with PVC jacket.

15.605 Technical

This proposal is to provide steel carrier pipe we recommend and an ASTM pressure rating of 1200psi vs. FRPs 250psi rating. The temperature rating of FRP is 300F while steel is more than 700F. The repair of steel piping requires minutes to rest as compared to the hours of cure time after a repair is made. This benefit would reduce outage time should a leak ever occur. The disadvantages of the steel piping are that the cost of the material is greater as well as the number of labor hours it takes to perform the connections. The other distinct difference is that FRP does not react or corrode in the same way steel does, steel will rust whereas FRP will not. However, the steel pipe has an expected life of 45 years which is an acceptable service life. Many steel piping systems exceed 45 years of useful life whereas the building heat exchangers, boilers, pumps etc. are typically what need to be replaced in increments between 15 and 20 years. The proposed use of the steel carrier piping would allow the use of Aerogel insulation which is not suitable for use with FRP carrier piping. The materials used for insulating FRP piping is typically a type of foam insulation, the Aerogel has an R value of 25 whereas foam has an R value of 7. This improved insulation shall reduce the energy consumption of the facility. A cut submittal is transmitted separately titled Multi-Therm 750 PE

Submittal as an upgrade to the Zone 1 piping.

Our response to this proposal includes the **deduct alternate** to keep the system DCM installed in NAC 13 during the past winter originally as part of emergency measures for heating. It was discovered during the past winter that NAC 13 originally was not a part of the campus loop. Understanding that NAC 13 was originally not a part of the loop DCM provided all new equipment and restoration of the original heating components in the building because it was determined it would be the best way to provide heat when the campus loop had failed. DCM is proposing as the designer of record this system be retained as installed and offer a credit to the government in the form of a deduct alternate price to PS010. As a part of the deduct alternate DCM shall ensure the equipment that was installed in NAC13 be fully commissioned and address any items that would prevent it from operating as intended.

15.606 Terms

The work would be done in accordance with all other terms of the existing contract. Method of award would be through modification of existing contract. Period of performance is up to October 1, 2018.

For reference a summary about the proposed material is as follows:

Multi-Therm 750 PE
PIPE: Schedule 40 black steel, ASTM A53, Grade B, ERW, DOMESTIC SOURCE
INSULATION: Aerogel
CONDUIT: 10 ga. Black Steel Exterior Coated with 1" PU Foam and HDPE Jacket SYSTEM
DESCRIPTION: Perma-Pipe straight sections in 40' max lengths, with pre-fabricated fittings.

Price for Zone 2 and 3 including NAC 13 resilience and upgrades to piping -------(b) (4)

Deduct Alternate for NAC 13 ---------(b) (4)

Price for Zone 2 and 3 excluding NAC 13 resilience and upgrades to piping -------(b) (4)

See Attached Price Worksheets

Respectfully Submitted,
DCM Architecture & Engineering.
Signature

Robert A. Benson PE,
Vise President

Accepted,

Signature

Print Name/Title

All Items (by Division)

Division:

Ic	Type	Name	Description	Qty	Units	Cost Each	Markup %	Price Each	Price Total
(Im	Labor	Rebar Labor (per Hour)	Tie, Bend and Set	(b) (4)	Hours	(b) (4)			
(Im	Labor	Concrete Pour Labor (per Hour)	Pour, Smooth, and Finish		Hours				
				2.21					

Division: 2 Site Construction

Ic	Type	Name	Description	Qty	Units	Cost Each	Markup %	Price Each	Price Total
(Im	Labor	Base Labor (priced per SQ FT)	Labor for Base Crew	(b) (4)	SQ FT	(b) (4)			
(Im	Labor	Asphalt Labor (priced per SQ FT)	Labor for Asphalt Crew		SQ FT				
(Im	Material	HD Asphalt (priced per CU YD)	Heavy Duty - 3600 LBS per Cu		CU YD				
(Im	Material	Road Base (priced by Tons)	Class 5 Gravel - 3700 LBS per		Tons				
				5,062.66					

Division: 23 00 00 Heating, Ventilating, and Air Conditioning (HVAC)

Ic	Type	Name	Description	Qty	Units	Cost Each	Markup %	Price Each	Price Total
(Im	Material	Material	Pipe Fitting	(b) (4)	EA	(b) (4)			
(Im	Labor	Labor	Pipe Fitting		EA				
(Im	Labor	Mechanic Labor			FT				
(Im	Labor	Mechanic Labor			FT				
(Im	Labor	Mechanic Labor			FT				
(Im	Material	4" x 10' High Temp Pipe			EA				
(Im	Material	2" x 10' High Temp Pipe			EA				
(Im	Material	2" x 10' High Temp Pipe			EA				
				3,750.98					

Division: 3 Concrete

Ic	Type	Name	Description	Qty	Units	Cost Each	Markup %	Price Each	Price Total
(Im	Material	Stone Base (priced by Tons)	Crushed Stone - 3800 LBS per	(b) (4)	Tons	(b) (4)			
(Im	Material	Concrete Slab (priced per CU YD)	4000 PSI, 4" Thick		CU YD				

Division: 3 Concrete

Ic	Type	Name	Description	Qty	Units	Cost Each	Markup %	Price Each	Price Total
(Im	Material	Perimeter Forming Material (priced per FT)	2x6.5 Dimensional Lumber	(b) (4)	FT	(b) (4)			
(Im	Material	15 mil Vapor Barrier (priced per Roll)	20' x 100' roll, High Performanc		Roll(s)				
(Im	Material	Rebar (priced per LBS)	#4 Rebar, 0.668 LBS/FT		LBS				
				505.44					

Division: 31 00 00 Earthwork

Ic	Type	Name	Description	Qty	Units	Cost Each	Markup %	Price Each	Price Total
(Im	Material	Material	Trenching	(b) (4)	CU YD	(b) (4)			
(Im	Material	Material	Trenching		CU YD				
(Im	Material	Material	Trenching		CU YD				
(Im	Labor	Labor	Trenching		CU YD				
(Im	Labor	Labor	Trenching		CU YD				
(Im	Labor	Labor	Trenching		CU YD				
				12,251.37					$695,231.10

All Items (by Division)

Division:

Ic	Type	Name	Description	Qty	Units	Cost Each	Markup %	Price Each	Price Total
(Im	Labor	Rebar Labor (per Hour)	Tie, Bend and Set	(b) (4)	Hours	(b) (4)			
(Im	Labor	Concrete Pour Labor (per Hour)	Pour, Smooth, and Finish		Hours				
				2.21					

Division: 2 Site Construction

Ic	Type	Name	Description	Qty	Units	Cost Each	Markup %	Price Each	Price Total
(Im	Labor	Base Labor (priced per SQ FT)	Labor for Base Crew	(b) (4)	SQ FT	$1.15	0.00	$1.15	$2,858.23
(Im	Labor	Asphalt Labor (priced per SQ FT)	Labor for Asphalt Crew		SQ FT	(b) (4)			
(Im	Material	HD Asphalt (priced per CU YD)	Heavy Duty - 3600 LBS per Cu		CU YD				
(Im	Material	Road Base (priced by Tons)	Class 5 Gravel - 3700 LBS per		Tons				
				5,062.66					

Division: 23 00 00 Heating, Ventilating, and Air Conditioning (HVAC)

Ic	Type	Name	Description	Qty	Units	Cost Each	Markup %	Price Each	Price Total
(Im	Material	Material	Pipe Fitting	(b) (4)	EA	(b) (4)			
(Im	Labor	Labor	Pipe Fitting		EA				
(Im	Labor	Mechanic Labor			FT				
(Im	Labor	Mechanic Labor			FT				
(Im	Material	4" x 10' High Temp Pipe			EA				
(Im	Material	2" x 10' High Temp Pipe			EA				
				2,997.42					

Division: 3 Concrete

Ic	Type	Name	Description	Qty	Units	Cost Each	Markup %	Price Each	Price Total
(Im	Material	Stone Base (priced by Tons)	Crushed Stone - 3800 LBS per	(b) (4)	Tons	(b) (4)			
(Im	Material	Concrete Slab (priced per CU YD)	4000 PSI, 4" Thick		CU YD				
(Im	Material	Perimeter Forming Material (priced per FT)	2x6.5 Dimensional Lumber		FT				
(Im	Material	15 mil Vapor Barrier (priced per Roll)	20' x 100' roll, High Performanc		Roll(s)				

Division: 3 Concrete

Ic	Type	Name	Description	Qty	Units	Cost Each	Markup %	Price Each	Price Total
(Im	Material	Rebar (priced per LBS)	#4 Rebar, 0.668 LBS/FT	(b) (4)	LBS	(b) (4)			
				505.44					- - - - - -

Division: 31 00 00 Earthwork

Ic	Type	Name	Description	Qty	Units	C
(Im	Material	Material	Trenching	(b) (4)	CU YD	(b) (4)
(Im	Material	Material	Trenching		CU YD	
(Im	Labor	Labor	Trenching		CU YD	
(Im	Labor	Labor	Trenching		CU YD	
				- - - - -		
				10,893.71		$663,014.60